- 1. A method of functionally connecting a portion of the peripheral nervous system of a vertebrate to a portion of the central or peripheral nervous system of said vertebrate, comprising the steps of bringing the portion of the peripheral nervous system and the portion of the central or peripheral nervous system close to each other, applying to the gap between the two portions a fibrin glue mixture comprising a growth factor, fibrinogen, aprotinin and divalent calcium ions so that the fibrin glue mixture is simultaneously in contact with the two portions, and forming an attachment between the portion of the peripheral nervous system and the portion of the central or peripheral nervous system of said vertebrate.
- 2. The method of claim 1, wherein the portion of the peripheral nervous system is connected to a portion of the central nervous system.
- 3. The method of claim 1, wherein the growth factor is selected from the group consisting of a glial cell line-derived neurotrophic factor, transforming growth factor-beta, fibroblast growth factor, platelet-derived growth factor and epidermal growth factor, vascular endothelial growth factor, and neurotrophin.
- 4. The method of claim 1, wherein the components of the fibrin glue mixture can be applied to the gap simultaneously or separately.
- 5. The method of claim 3, wherein the growth factor is fibroblast growth factor, which is acidic or basic fibroblast growth factor.
- 6. The method of claim 4, wherein the fibroblast growth factor is acidic fibroblast growth factor.
- 7. The method of claim 1, wherein the divalent calcium ions are provided by the addition of calcium chloride or calcium carbonate.
- 8. The method of claim 1, wherein the fibrin glue mixture comprises fibroblast growth factor, fibrinogen, aprotinin and calcium chloride.
- 9. The method of claim 1, wherein the fibrin glue mixture comprises acidic fibroblast growth factor, fibrinogen, aprotinin and calcium chloride.
- 10. The method of claim 9, wherein the fibrin glue mixture comprises 0.0001-1000 mg/ml of fibroblast growth factor, 10-1000 mg/ml of fibrinogen, 10-500 KIU/ml of aprotinin and 1-100 mM of calcium chloride.

- 11. The method of claim 10, wherein the fibrin glue mixture comprises 1 mg/ml of fibroblast growth factor, 100 mg/ml of fibrinogen, 200 KIU/ml of aprotinin and 8 mM of calcium chloride.
- 12. A method of functionally reconnecting an avulsed nerve root to the spinal cord to be connected in a vertebrate, comprising the steps of bringing the avulsed nerve root close to the spinal cord, applying to the gap between the nerve root and the spinal cord a fibrin glue mixture comprising a growth factor, fibrinogen, aprotinin and divalent calcium ions so that the fibrin glue mixture is simultaneously in contact with the nerve root and the spinal cord, and forming an attachment between the nerve root and the spinal cord of said vertebrate.
- 13. The method of claim 12, wherein the growth factor is selected from the group consisting of a glial cell line-derived neurotrophic factor, transforming growth factorbeta, fibroblast growth factor, platelet-derived growth factor and epiderinal growth factor, vascular endothelial growth factor, and neurotrophin.
- 14. The method of claim 12, wherein the components of the fibrin glue mixture can be applied to the gap simultaneously or separately.
- 15. The method of claim 13, wherein the growth factor is fibroblast growth factor, which is acidic or basic fibroblast growth factor.
- 16. The method of claim 14, wherein the fibroblast growth factor is acidic fibroblast growth factor.
- 17. The method of claim 12, wherein the divalent calcium ions are provided by the addition of calcium chloride or calcium carbonate.
- 18. The method of claim 12, wherein the fibrin glue mixture comprises fibroblast growth factor, fibringen, aprotinin and calcium chloride.
- 19. The method of claim 12, wherein the fibrin glue mixture comprises acidic fibroblast growth factor, fibringen, aprotinin and calcium chloride.
- 20. The method of claim 19, wherein the fibrin glue mixture comprises 0.0001-1000 mg/ml of fibroblast growth factor, 10-1000 mg/ml of fibrinogen, 10-500 KIU/ml of aprotinin and 1-100 mM of calcium chloride.

- 21. The method of claim 20, wherein the fibrin glue mixture comprises 1 mg/ml of fibroblast growth factor, 100 mg/ml f fibrinogen, 200 KIU/ml of aprotinin and 8 mM of calcium chloride.
- 22. The method of claim 12, wherein the nerve root is cervical root.
- 23. The method of claim 1, further comprising the step of introducing a tissue graft to the gap between the portion of the peripheral nervous system and the portion of the central nervous system.
- 24. The method of claim 23, wherein the tissue graft is a sural or intercostal nerve of said vertebrate.
- 25. The method of claim 12, further comprising the step of introducing a tissue graft to the gap between the nerve root and the spinal cord.
- 26. The method of claim 25, wherein the tissue graft is a sural or intercostal nerve of said vertebrate.
- 27. A mixture for functionally reconnecting an avulsed nerve root to the spinal cord to be connected in a vertebrate, comprising acidic fibroblast growth factor, fibrinogen, aprotinin and calcium chloride.
- 28. The mixture of claim 27, comprising 0.0001-1000 mg/ml of acidic fibroblast growth factor, 10-1000 mg/ml of fibrinogen, 10-500 KIU/ml of aprotinin and 1-100 mM of calcium chloride per ml.
- 29. The mixture of claim 28, comprising 1 mg/ml of acidic fibroblast growth factor, 100 mg/ml of fibrinogen, 200 KIU/ml of aprotinin and 8 mM of calcium chloride.
- 30. The method of claim 1, wherein the portion of the peripheral nervous system is connected to another portion of the peripheral nervous system.
- 31. The method of claim 30, wherein the two portions of the peripheral nervous system is the proximal and distal ends of a peripheral nerve.
- 32. The method of claim 31, wherein the peripheral nerve is a sciatic nerve.
- 33. The method of claim 1, further comprising the step of suturing or anastomosing the two portions of the nervous system to be connected.